A New Tersilochine Parasite of the Rose Curculio (Hymenoptera: Ichneumonidae)

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Some time ago Dr. W. V. Balduf sent for identification a number of specimens of a parasite he had reared from the rose curculio, *Rhynchites bicolor* (F.). He is preparing for publication a paper on the "Rose Hip Community," including in it the biology of the rose curculio and its parasites. The parasite received from him represents a genus and species of Tersilochini new to the described Nearctic fauna.

This new species fits the description given by Foerster, 1868 (Verh. naturh. Ver. preuss. Rheinlande u. Westphalens 25: 148) for *Temelucha,* a genus described without included species. Unfortunately the first species included in *Temelucha,* and thus its genotype,[1] was *Temelucha philippinensis* Ashmead, 1904 (Jour. N. Y. Ent. Soc. 12: 18),[2] a cremastine actually belonging in the genus *Cremastus* Gravenhorst. H. L. Viereck's 1914 designation (U. S. Nat. Mus. Bul. 83: 144) of *Temelucha plutellae* Ashmead, 1904 (Canad. Ent. 36: 101),[3] the second included species, as genotype of *Temelucha,* is invalid. Szepligeti was the first European author to include tersilochine species in the Foerster genus without question (1905, Ann. Mus. Nat. Hung. 3: 531–532). Most of the later European authors have treated *Temelucha* as a tersilochine genus but since *Temelucha* is a synonym of *Cremastus* Gravenhorst, a new genus is needed for species fitting the characterization given by Foerster.

A revision of the tribe Tersilochini based on a study of the type specimens of the genotype is needed before many of our Nearctic species, described and undescribed, can be correctly placed or genera adequately defined. For this reason the following new genus is described only in comparison with other tersilochine genera whereas the species description is complete.

[1] Zool. Nomencl. Bul., vol. 4, 1950, pp. 160, 346.

[2] Received at Smithsonian Institution March 28, 1904.

[3] Mailed April 6, 1904.

LUCHATEMA, new genus

Genotype: *Luchatema baldufi,* new species.

The upcurved ovipositor, the polished abdomen, the thickening of the basal vein of the forewing where it joins the stigma, the right angle formed by the two abscissae of the radius, and the broad clypeus with an apical fringe of hairs are all characters which place this genus in the Tersilochini.

Luchatema may be separated from *Barycnemis* Foerster, *Leptopygus* Foerster, and *Cratophion* Thomson by the shape of the thorax, which is almost as high as long in both sexes (ratio of approximately 7:8) whereas in the other genera mentioned the thorax is almost twice as long as high in the females and at least one and a half times as long as high in the males. The basal area of the propodeum is approximately only one-sixth as long as the petiolar area. In these respects *Luchatema* resembles *Tersilochus* Holmgren, *Heterocola* Foerster, *Allophrys* Foerster, *Aneuclis* Foerster, *Isurgus* Foerster, and *Ischnobatis* Foerster (as represented in the U. S. N. M. Collection). The median basal carina of the propodeum and the position of the propodeal spiracle (distant by at least its diameter from the pleural carina) separate this new genus from *Tersilochus;* from *Aneuclis* it can be distinguished by the longer ovipositor which is at least as long as the whole body; from *Isurgus* and *Allophrys* by the longer antennae (28–33 segmented); from *Heterocola* by the shorter palpi (in *Heterocola* the palpi are fully as long as head is high), and by the postfurcal second recurrent (in *Heterocola proboscidalis* (Thoms.), genotype of *Heterocola,* the second recurrent is antifurcal); and finally from *Ischnobatis* by the more or less rugulose propodeum.

Luchatema baldufi, new species

Holotype ♀: Length of body 7 mm., ovipositor 7 mm., antenna 3.4 mm., forewing 5 mm. Black except clypeus, mandibles, palpi, legs, abdomen, and ovipositor which are reddish brown with the antennae, legs, mandibles, clypeus, and mouth parts more testaceous. The holotype and several other specimens have a reddish tinge on the propodeum and mesopleura.

Head transverse, broader than long and broader than thorax;

eyes slightly convergent, temples full, nearly as long as eyes; ocelli small, the two lateral ocelli closer to each other than to compound eyes; clypeus more than twice as broad as long, the apical margin rounded but with the middle third somewhat truncate; malar space nearly as long as basal width of mandible; palpi very slender, maxillary palpi 4-segmented, labial palpi 3-segmented; tongue as long as labial palpi; upper tooth of mandible longer than lower tooth; antennae 29-segmented; antennal crypts separated by about 2½ times their diameter, but distant from eyes by slightly less than their diameter; face rather closely though finely punctate; clypeus very sparsely punctate with fringe of hairs on median apical third.

Thorax at least seven-eighths as high as long, polished, pubescent, and finely but densely punctate; notaulices faintly impressed only anteriorly and bordered on the upper side by a very irregular carina. Scutellum with sides carinate only on basal half or less, scutellar fovea crossed by seven short carinae (in the paratype series these vary in number from 5 to 8); mesopleural fovea and mesopleural suture also crossed by similar carinae; propodeum rugose and rugosely punctate, with a short median basal carina meeting the one transverse carina where the propodeum becomes abruptly declivus, the petiolar area divided into three distinct areas by two longitudinal carinae, a small round, propodeal spiracle at the end of a short carina (at least as long as the diameter of the spiracle) extending from near the anterior end or base of the lateral carina; wing venation characteristic for the tribe, the veins reddish brown and the stigma darker except for small anterior and posterior portions yellowish, tegulae testaceous; so-called second trochanter of legs not distinct; hind basitarsus nearly as long as remaining segments combined, tibial spurs short and subequal; abdomen polished lacking pubescence, with long slender petiole about two-thirds length of thorax, elongate gastrocoeli of second segment nearly as long as half the width of base of segment, epipleura of abdominal tergites not separated by a fold or carina; ovipositor about as long as body, slender, up-curved, with apical notch shallow; sheaths blackish with reddish tinge, slender, sparsely hairy and ridged.

Allotype male: Length 7 mm., antennae 31-segmented. Except for usual sex differences similar to female.

Additional material, which includes 66 ♂♂ and 92 ♀♀, shows the body length to vary from 4.2 to 7 mm. in the ♂♂ and from about 4.3 to 7 mm. in the ♀♀. The number of antennal segments varies from 28 to 33 in the ♂♂, and from 28 to 31 in the ♀♀. Variation also occurs in both sexes in length of median basal vein and in rugosity of sculpture of propodeum; in the distance of the propodeal spiracle from the pleural carina; and in the elevation of the propodeal carinae; in the extent of black on the petiole and blackness of thorax (some specimens have a reddish tinge while others are jet black, the latter with the browns also darker).

Holotype ♀, *allotype* ♂, and 134 *paratypes* (54 ♂♂, 80 ♀♀) are in the U. S. National Museum Collection under Type No. 62981. Twenty-four paratypes (12 ♂♂, 12 ♀♀) were sent to Dr. Balduf. Several specimens with head or abdomen missing are not included in the type series.

Type locality: Chetek, Wisconsin. Paratypes came also from the following localities: Black River Falls, Solon Springs, and Endeavor, all in Wisconsin; Ely, Minnesota; Saskatoon, Saskachewan; and Urbana, Illinois. In the U. S. National Museum Collection are 25 specimens from Massachusetts, New York, Iowa, South Dakota, and Wyoming which I believe are this species.

Host: *Rhynchites bicolor* (F.), the rose curculio. Reared by Dr. Balduf.

Three specimens from Virginia with no definite median, basal longitudinal carina on the propodeum belong either in the genus *Luchatema* or *Tersilochus*. The elongate gastrocoeli make me believe the species they represent is not *Tersilochus* but until I can see the genotype, *Tersilochus iocator* (Grav.), I cannot be certain of the characters that identify the genus. Finally a single specimen, from Pringle, South Dakota, with a definite median longitudinal carina on propodeum may possibly belong in the new genus, but, because of the shorter gastrocoeli and ovipositor, placement must await a revision of the tribe.